DEVELOPING AN ONLINE ASSESSMENT OF CLINICAL SKILLS AND DECISION MAKING WITHIN AN EXAMINATION OF THE NEWBORN DURING COVID 19; TRANSFORMING THE OBSERVED STRUCTURED CLINICAL EXAMINATION

BACKGROUND

The COVID-19 (CV19) virus reached pandemic levels in the UK in March 2020, with all in-person teaching and assessing swiftly ceasing at UK universities. In addition, final year midwifery students were deployed as part of the NHS workforce strategy (NMC, 2020). The examination of the newborn module, encompassing the Public Health England (2020) screening of the newborn and infant, is embedded in the BCU midwifery curricula. Completion of the module, and subsequent qualification in midwifery allows paediatricians services to focus on specialist care (Stanyer & Hopper, 2019). Assessment of the module was via an Observed Structured Clinical Examination (OSCE), with learning outcomes requiring demonstration of practical skill with articulation of the supporting evidence base and justification of decision making. There was a rapid decision to use Microsoft Teams (MST) platform for teaching and assessment. As the audio-visual had potential to allow learning outcomes to be demonstrated and the Virtual OSCE (VOSCE) evolved. 

CHANGE MANAGEMENT

MST had not been used previously so guidance was developed to help students and assessors with technological and audio-visual skills. The VOSCE was aligned to the module learning outcomes and the assessments continued to be conducted by 2 examiners. Demonstration of clinical assessment skills and justification of clinical decisions based on current evidence was paramount to the assessment, and the MST platform allowed for this to continue. The functionality of MST allowed teaching to be recorded, enabling access for revision and to review missed sessions due to clinical working pattern. The recording of assessment and the post assessment discussion of grade allocation is good practice within the OSCE, and this was enhanced with the recording via MST. It was important to review student achievement. The VOSCE results show that it was able to discriminate between candidates ability. Subsequent evaluation by the external examiners confirmed the quality of the process and assessments corresponded to previous years. Student performance was slightly better than previous years (Fig.3). However, this form of assessment did have challenges. Flexibility and increased opportunity to attend assessments was required as the impact of CV19 increased need for extenuation. Technological issues and Wi-Fi connectivity had a minimal impact. Additional time for assessment was required in order for assessors to scan the student environment, and computers for any potential “cheat” materials. Students improvised equipment and manikins to demonstrate skills, but verbal description also ensured students knowledge of and ability to perform skills. Guidance was provided to help students and assessors prepare “home” conditions for examination, so that minimal interruptions would occur. It would appear the MST is being used in medical schools facing similar challenges (Hopwood et al 2020).

RESULTS

Figure 1: Average review of recorded teaching sessions

- Once: 2
- 2–4 times: 7
- 5–7 times: 1
- More than 7 times: 0

Figure 2: Student evaluation of MST for assessment

- Using microsoft teams: 2
- Face to face in University: 6
- No preference: 3

Figure 3: Student outcomes first attempt

<table>
<thead>
<tr>
<th>Year assessed</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>50</td>
<td>70</td>
</tr>
<tr>
<td>Range of marks (1% is awarded for unsafe answers)</td>
<td>1%–87%</td>
<td>1%–92%</td>
</tr>
<tr>
<td>Mean</td>
<td>42.29</td>
<td>57.26</td>
</tr>
<tr>
<td>SD</td>
<td>23.1</td>
<td>15.06</td>
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STUDENT EVALUATION OF MST

Eleven students responded and all found MST accessible and useful for revision. All had access to personal IT equipment. One commented “I found using the microphone option daunting, using ‘chat’ was easier.” With regard to the assessment, one commented “I liked doing the assessment from home...being in uni can be more daunting and I get nervous.”

DISCUSSION

As the decision to adopt MST for assessment was made rapidly, it was important to review student achievement. The VOSCE results show that it was able to discriminate between candidates ability. Subsequent evaluation by the external examiners confirmed the quality of the process and assessments corresponded to previous years. Student performance was slightly better than previous years (Fig.3). However, this form of assessment did have challenges. Flexibility and increased opportunity to attend assessments was required as the impact of CV19 increased need for extenuation. Technological issues and Wi-Fi connectivity had a minimal impact. Additional time for assessment was required in order for assessors to scan the student environment, and computers for any potential “cheat” materials. Students improvised equipment and manikins to demonstrate skills, but verbal description also ensured students knowledge of and ability to perform skills. Guidance was provided to help students and assessors prepare “home” conditions for examination, so that minimal interruptions would occur. It would appear the MST is being used in medical schools facing similar challenges (Hopwood et al 2020).

CONCLUSION

MST is a platform that can be used for VOSCE assessment. It cannot be assumed that students will have access to IT equipment, or be able to find equipment for assessment. If this form of assessment were to be used for future blended learning, then investment may be needed for some students to have an equal standing for teaching and assessing. There is potential for students to study and be assessed at a distance from the host university, with a prospect to cultivate nationally and international programmes of study via a virtual platform. Further research and discussions are required.

REFERENCES


Nursing and Midwifery Council (2020) Emergency standards for nursing and midwifery education. nmc.org.uk